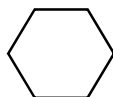


Lab FW 3.3A Finding Perimeters & Area



Name _____

Date _____ Period _____

Filling & Wrapping Unit



Materials: Mathematics Reference Sheet (GEPA), Centimeter Ruler, Pencil



Key Learning: Understand how to calculate the area and perimeter of various shapes. Recognize certain complex shapes as composites (combinations) of simple shapes.



Guided Directions



this is a
**GROUP
ACTIVITY**

1. Measure and label the lengths of the sides of each figure on the lab sheets. Round your measurements to the **nearest 10th of a centimeter**. Everyone in your group should make every measurement. You should reach a group **CONSENSUS** on all measurements before proceeding with any calculations.
2. Find the PERIMETERS and AREAS of the various figures. **Write the FORMULA (or formulas) you use in the space provided. SHOW YOUR WORK!!**

Note: Where appropriate, **DRAW, MEASURE AND LABEL ADDITIONAL LINE SEGMENTS** that are required to form sub-figures – such as triangles, rectangles, and trapezoids – that will help you make your calculations.

3. Fill in the **TABLE** provided at the end of the lab packet. For ease of use, you may want to tear off the last page.

Figure: **TRIANGLE**

Perimeter:
(sum of the lengths of the sides)

Area Formula(s):

Area:

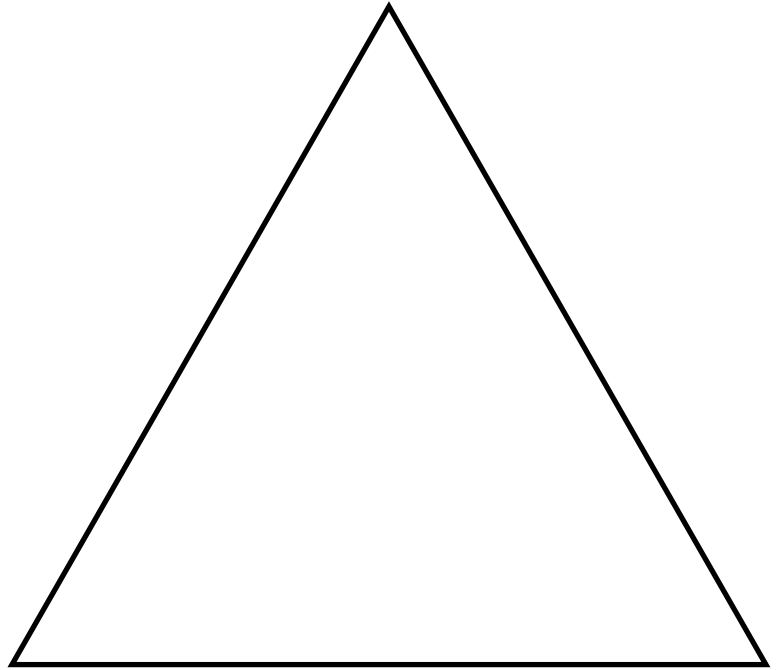


Figure: **TRAPEZOID**

Perimeter:

Area Formula(s):

Area:

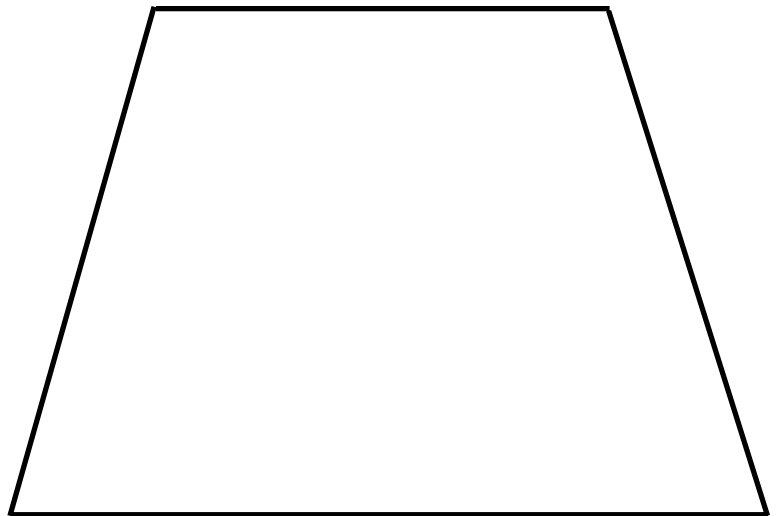


FIGURE: SQUARE

Perimeter:
(sum of the lengths of the sides)

Area Formula(s):

Area:

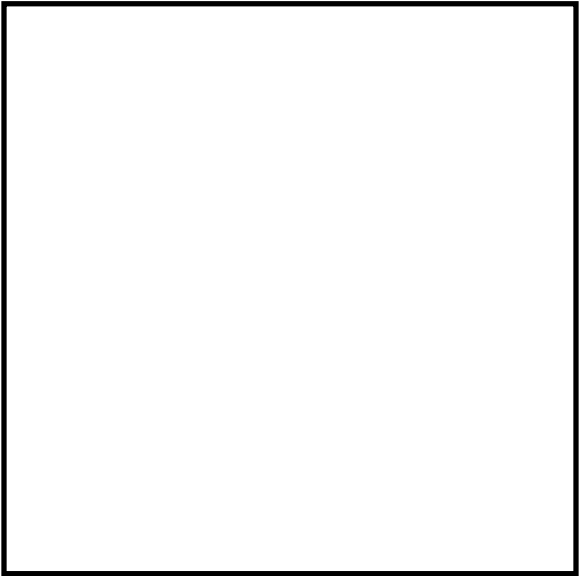


Figure: Regular Pentagon

Perimeter:

Area Formula(s):

Area:

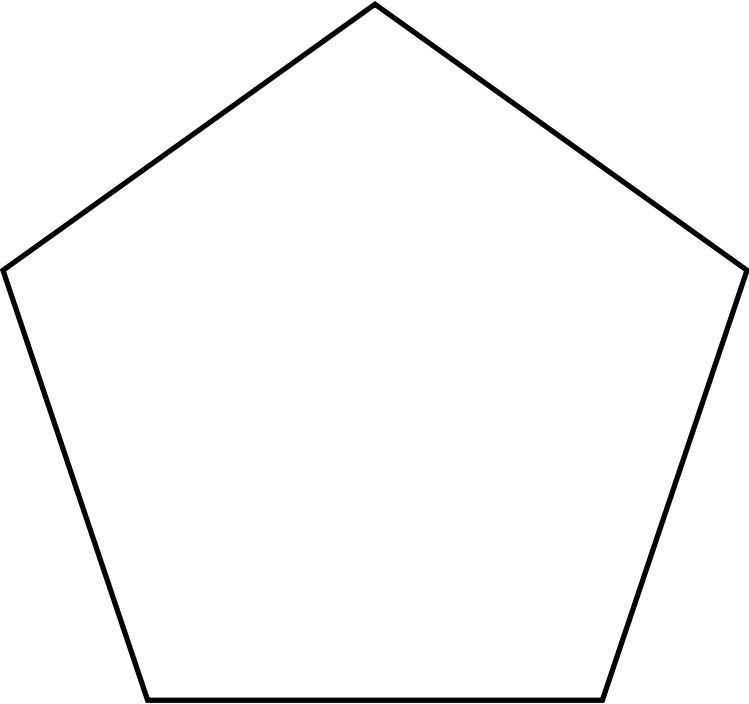


Figure: **Regular Hexagon**

Perimeter:

Area Formula(s):

Area:

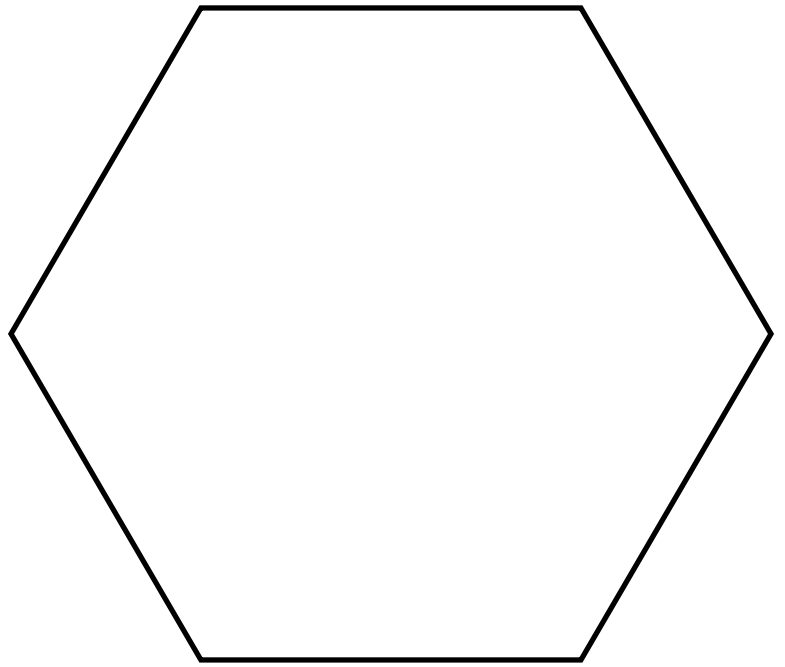


Figure: **Regular Octagon**

Perimeter:

Formula(s):

Area:

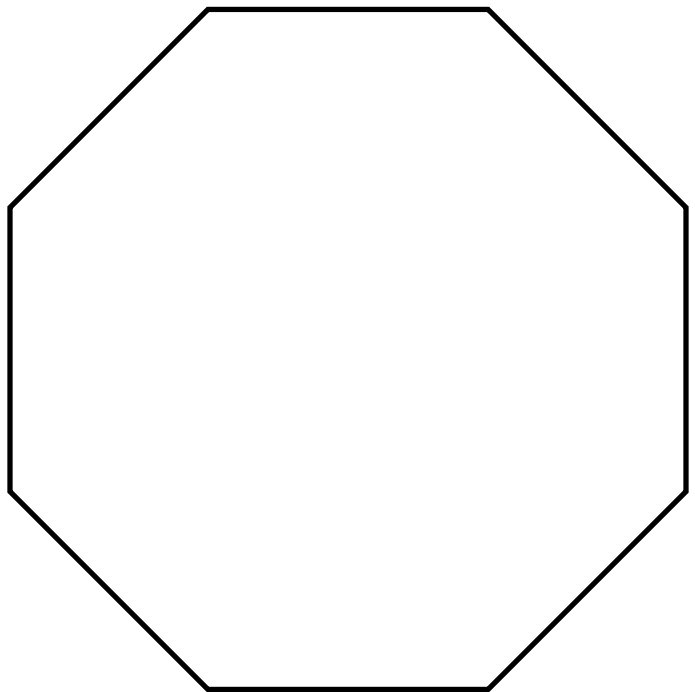
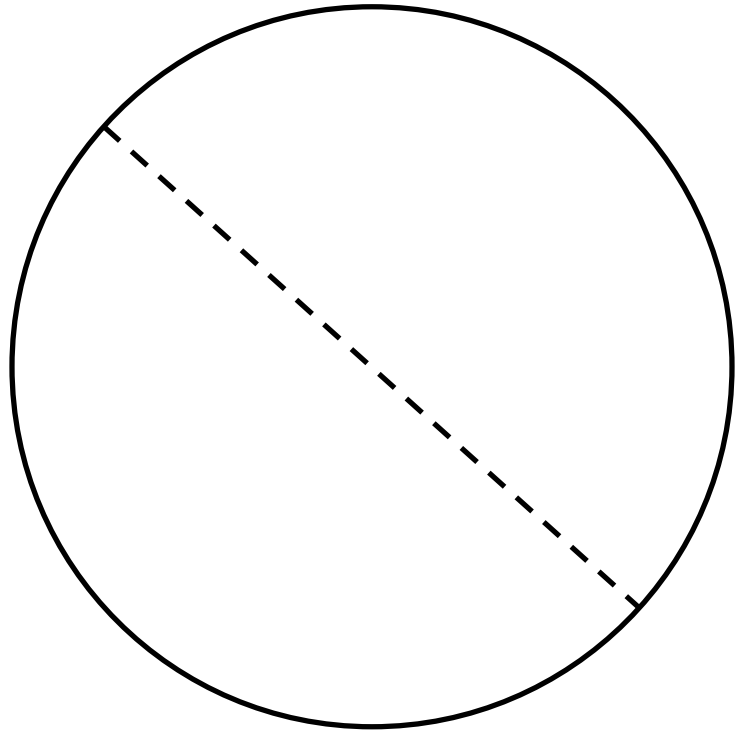


Figure: **Circle**

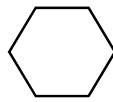
Perimeter:

Formula(s):

Area:



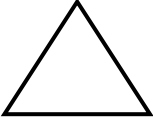
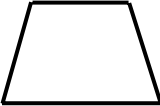

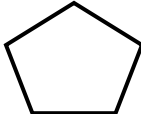
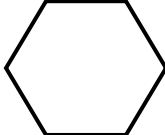
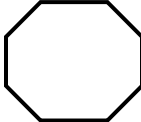

Lab FW 3.3A
Finding Perimeters & Area



Name _____

Date _____ Period _____

Perimeter and Area Table

<i>Figure</i>	PERIMETER	If you used any sub-figures to calculate the AREA, re-draw the lines and write the name(s) here	AREA
TRIANGLE			
TRAPEZOID			
SQUARE			
PENTAGON			
HEXAGON			
OCTAGON			
CIRCLE			

Follow-up Question: Do you see a relationship between the area of the various figures and number of sides of each figure/polygon? Just as a cube was the most efficient shape for a box, which two-dimensional figure seems to make the best use of a given length of perimeter? Explain your reasoning.